BUSHMASTER FIREARMS, INC.

Carbon 15 .22 LR

Operating and Safety Instruction Manual

AZ 15910

Please Practice Safe Firearms Handling

This Operation Manual should always accompany this firearm.
When you lend, give, or sell this firearm,
be sure this manual goes with it.
To obtain a replacement manual, write to:
Bushmaster Firearms, Inc.
999 Roosevelt Trail • Windham, Maine • 04062
or call 800-883-6229 and include the serial number
or have it available when making a phone request.

Model: _____

Serial Number: _____

Purchased From: _____

Date Purchased: _____

Before disassembling, loading, or using this firearm, please Read, Understand, and Follow all the instructions in this manual regarding proper handling and safe use!

Caution: If unfamiliar with firearms, seek further advice through Gun Safety Organizations, Local Gun Clubs, NRA Approved Instructors, or similar qualified organizations.

Warning: If this firearm is carelessly or improperly handled, unintentional discharge could result and could cause injury, death, or damage to property.

Warning: This Firearm could chamber and fire a round if it is dropped or jarred with or without a loaded magazine in place – with the bolt carrier assembly locked to the rear, or in its forward position.

Caution: Use only clean, dry, high quality commercially manufactured ammunition. Use only ammunition that is appropriate for the .22 LR caliber of this Bushmaster firearm.

Mission Statement

Our mission is to manufacture quality firearms, made with Pride in the USA, and using the best American made parts. We value our customers, and do our best to assure quality and friendly service. Bushmaster Firearms, Inc. is always striving to make great firearms even better.

Thank you for buying Bushmaster!

The safety warnings in this booklet are very important. By understanding the dangers inherent in the use of any firearm, and by taking the precautions described herein, you can enjoy the use of your Carbon 15 .22 LR Rifle. Failure to do so may result in serious injury to you or others, as well as severe damage to the firearm and/or property.

Note: For any information or details not covered in this Operating Manual, contact our Tech Support Staff at:

techsupport@bushmaster.com

800 883 6229

Table of Contents

Fundamental Rules & Procedures....4
Facts About Your Carbon 15....6
Getting Ready to Shoot....7
Immediate Action....8
Remedial Action....8
Bullet Stuck in Bore....9
Disassembly of Firearm....10
Cleaning Procedures....12
Disassembly of Bolt Carrier....14
Inspection....15
Lubrication of Parts....16
Trouble Shooting....17

Fundamental Rules and Procedures for Safe Firearms Handling

- Always treat every gun as if it were loaded!
- Always keep the firearm pointed in a safe direction!
- Always be sure the barrel is clear of any obstruction.
- Always be sure of what lies beyond your target and the safety of bystanders before you shoot.
- Always wear ear & eye protection when shooting.
- Always carry your gun so that you can control the direction of the muzzle if you fall or stumble.
- Always keep your finger off the trigger and leave the safety on until ready to shoot!
- Never load the firearm until ready to shoot!
- Never leave a firearm unattended. Guns and ammunition should always be secured and stored separately, and beyond the reach of children and adults unfamiliar with firearms.
- Never allow your firearm to be used by anyone who has not read this instruction and safety manual.
- Never point any gun, loaded or unloaded, at anything you do not intend to shoot.

- Never touch the barrel after firing - it could be very hot!
- If your rifle stops firing with a live round still in the chamber (a misfire), quickly remove the round, keeping your face away from the ejection port. If you cannot remove it within 10 seconds, remove the magazine, and wait 15 minutes with the rifle pointed in a safe direction. At this point, the rifle could still fire the round.
- If your bolt fails to unlock, and you try to free it by tapping the butt stock on the ground, while pulling on the charging handle, point the muzzle away from yourself, and in a safe direction.
- If there is water in the barrel, do not fire the rifle, it could explode!
- If a noticeable difference in sound or recoil is experienced, Stop Firing! This condition could indicate an incomplete powder burn and/or a bullet stuck in the bore.

Facts About Your New Bushmaster Carbon 15 .22LR Rifle

The Bushmaster Carbon 15 .22 LR rifle system consists of a firearm, 10 round magazine, and instruction manual. It is a very light weight firearm – blow back operated, magazine fed, and operates in semi-automatic mode (i.e., a single shot fired each time the trigger is pulled). Retracting the charging handle cocks the internal hammer and compresses the recoil spring. When the charging handle is released, it moves the bolt forward (driven by the recoil spring), strips a cartridge from the magazine, and chambers the cartridge. The bolt is held against the chambered cartridge by the recoil spring.

When the trigger is pulled, the hammer is released and strikes the firing pin. The firing pin indents the cartridge case rim and ignites the priming compound inside the rim and a great volume of gas is instantly generated which acts on the cartridge case in all directions. The bullet moves out of the cartridge case, and exits the muzzle. The bolt then moves rearward automatically, extracting and ejecting the fired cartridge case, and at the same time cocking the hammer and compressing the recoil spring, as described above. Once the trigger is released the firearm is ready to fire again. The firearm will fire if there is a cartridge in the chamber whether or not there is a magazine place. The rifling is R.H. twist, 1 turn in 16" – 6 lands & grooves.

Getting Ready to Shoot:

- With magazine well empty, pull back the charging handle and release to cock hammer so safety can be engaged.
- Put safety lever on SAFE.
- Insert the loaded magazine into the magazine well, always making sure the muzzle is pointed in a safe direction!
- Pull charging handle to rear and release. Move safety lever from SAFE to FIRE.

Note: If the rifle is not going to be fired immediately, make sure the selector lever is still on safe.

Immediate Action in Case of Trouble…

If your rifle stops firing perform the following immediate actions…

1. Remove the magazine.
2. Pull charging handle all the way back.
3. Check chamber for any obstruction or unfired cartridge.
4. Insert the magazine and make sure it is seated properly.
5. Pull the charging handle all the way back. RELEASE charging handle to feed a new round. Don't ride the charging handle forward.
6. Now fire. If the rifle won't fire, look for trouble and apply remedial action.

Remedial Action…

If your rifle stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, if you cannot remove it within 10 seconds, remove the magazine and wait 15 minutes with rifle pointing in a safe direction with the safety on during that time. This will help prevent injury if a round fires as a result of a hot barrel. Keep your face away from the ejection port while clearing a hot chamber.

- If your Rifle still fails to fire after performing Steps 1 through 5 above, and check again for a jammed cartridge case.
- If a cartridge case is in the chamber, open the receivers, remove the bolt carrier, and try to tap out the case with a cleaning rod.
- If your rifle fails to fire, check the trouble shooting section in this manual - or take the rifle to a qualified gunsmith.

Bullet Stuck in the Bore…

WARNING:
If an audible "POP" or reduced recoil is experience during firing,
IMMEDIATELY CEASE FIRE:
Then:

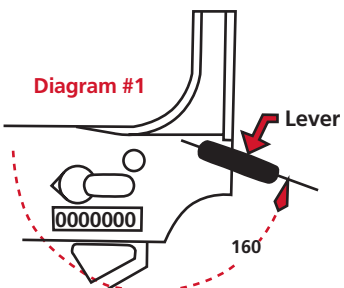
- Remove the magazine
- Lock the bolt to the rear
- Place the selector lever on SAFE
- Check for a bullet in the bore

Do not apply the "Immediate Actions" previously described.
If a bullet is stuck in the barrel of the weapon, do not try to remove it. Take the rifle to a qualified gunsmith.

Disassembly Of Firearm…

- Make sure firearm is not loaded and is pointed in a safe direction.
- Remove magazine and clear the chamber.
- Open the bolt by pulling the charging handle completely to the rear. While holding the charging handle in this position, use your other hand to lock the bolt in the rearward position by pushing the lower end of the bolt catch lever.
- The bolt carrier should lock in the rearward position. Push charging handle forward until it latches.
- If there was a round in the chamber it should have been ejected...make sure there is not a round in the chamber by LOOKING INTO THE CHAMBER from THE EJECTION PORT AND VISUALLY CONFIRMING THAT THERE IS NOT A ROUND IN THE CHAMBER!
- Now that you are sure the gun is unloaded, proceed in the disassembly.
- Send the Bolt "Home" by releasing the Bolt Catch.
- Rotate the takedown lever 160° counter - clockwise (See Diagram #1 on next page). Grasp the rifle and stock in opposite hands and firmly pull stock directly rearward. Do not attempt to fire the rifle with stock removed. To do so is unsafe and could cause bodily injury.

- Unscrew the buffer tube and remove the recoil spring and buffer.
- Use a small diameter drive tool, push both takedown pins from left to right until they stop.
- Separate the receivers by holding the grip with one hand and pulling the upper receiver up and forward. Note: The charging handle must be in the closed position; there will be some resistance due to the close tolerance fit between the upper and lower receivers.
- You may now pull back on the charging handle to remove the bolt carrier assembly.



Clean your rifle as soon as possible after firing, to make the job easier, and to avoid the development of any corrosion. When your firearm has not been fired, you should clean it at least once or twice a year if you live in a temperate climate, or as often as once a week in a tropical climate. If you get your firearm wet, clean it as soon as possible. Use only high quality products which include a cleaning rod, swab holder, cotton flannel bore patches, pipe cleaners, a small toothbrush, brass wire bristle bore and chamber brushes, and CLP (Cleaner–Lubricant–Preservative). After disassembling the rifle/pistol, thoroughly clean, inspect and lubricate all parts according to the techniques described in this manual.

Cleaning:

Note: the procedures below describe cleaning with a standard military issue multi-piece rod cleaning kit. Other commercial cleaning kits may include alternate instructions, which may be just as effective.

Clean the Bore…

- Always clean from chamber to muzzle in the natural direction of the bullet.
- Attach the three cleaning rod sections together, but leave each one about two turns short of being tight.
- Attach the bore brush, leaving it two turns short of being tight.
- Never run a brush down the barrel first or dip the brush in solvent.
- Swab out the bore with a patch moistened with "CLP".
- Point muzzle down. Hold the upper receiver in one hand while inserting the end of the rod without the brush into the chamber. Do not let either rub the bore,

Diagram #2

this will scratch the bore. About 2 - 3 inches of the rod should protrude out of the muzzle end.

- Attach the handle section of the cleaning rod to the threaded end that is sticking out of the muzzle. Diagram #2
- Pull the brush through the bore and out the muzzle. You should be able to see the rod twisting as you pull it. This is the brush "tracking" in the rifling. Never reverse the brush in the chamber or bore.
- After one pull, take the handle section off , and repeat the process.
- After three or four pulls, the three rod sections and the bore brush may become screwed tightly together. Loosen them up and repeat the process.
- Send a patch through the bore occasionally to help clean out the debris that the brush has loosened. Just replace the bore brush with the rod tip (patch holder) and a wet patch. Pull it through. If you leave the rods loose again the patch will "track" in the rifling as before. But remember, always have the bore wet with cleaner before trying to pull a brush through.

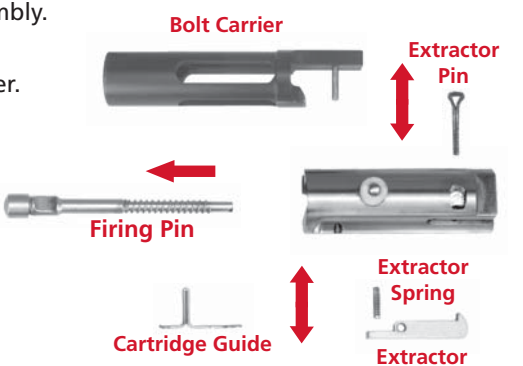
Disassembly of Bolt Carrier Assembly…

- Clean the bolt carrier assembly and components in a suitable cleaning solvent and remove any built-up carbon from the bolt.
- Clean the rifle using a commercially available gun cleaner (WD-40 works well for cleaning exterior surfaces of the receivers.) Clean bore with bore brush and wipe out with cleaning patch.
- Re-assembly is reverse of disassembly.

1. Remove bolt assembly from carrier.

2. Remove firing pin and spring.

3. Remove extractor pin, extractor, and extractor spring.



4. Remove cartridge guide, by removing end from hole and pulling wire from slot. Pull wire down to remove.

Bolt assembly should be disassembled only when dirty or damaged. Always replace damaged parts or see a qualified gunsmith.

Inspection Before Lubricating…

- Check the bolt: Look for cracks or fractures. Bolts with any pitting extending into the firing pin hole should be replaced.

- Check the firing pin: If it is bent, cracked, too sharp, it should be replaced.

- Check the extractor and extractor spring. If the extractor is chipped, or has broken edges in the area of the lip that engages the cartridge rim, it should be replaced.

- Check the cartridge guide for wear or damage. To reassemble, make sure cartridge guide is pressed back in place and the end should pop into hole.

Lubrication…

Upper and Lower Receivers:

Lightly Lubricate

- The inside of the upper receiver, bore and chamber (using cleaning rod and patch).
- The firing pin with CLP.
- The charging handle and the inner and outer surfaces of the bolt carrier.

Generously Lubricate

- All moving parts inside the lower receiver (trigger, hammer, safety, bolt catch, etc), and all its various pins and detents. Don't forget the takedown, pivot pins, and their detents.
- Wipe off fingerprints (they can start the corrosion process on any metal parts) from exterior surfaces with a soft oiled black rag (black rag prevents visible lint).

Trouble Shooting…

Problem:	Check For:	What To Do:
Won't Fire	Selector lever on SAFE	Put it on FIRE
	Too much oil in firing pin recess	Wipe out with pipe cleaner
	Defective ammunition	Remove and discard
	Too much carbon on firing pin or in firing pin recess	Clean
Won't Extract	Dirty or corroded ammo	Remove stuck round - push out with cleaning rod

	Carbon in chamber	Clean chamber
	Fouling or carbon in extractor recess or lip	Clean extractor
Won't feed	Dirty or corroded ammo	Clean
	Dirty magazine	Clean
	Defective magazine	Replace
	Too many rounds in magazine	Take out excess
	Action of buffer assembly is restricted	Take out buffer and spring. Clean them.
	Magazine not fully seated	Adjust magazine catch: turn catch clockwise to tighten and counter clockwise to loosen.

Double Feed	Defective magazine	Replace
Won't Chamber	Dirty or corroded ammo	Clean
	Damaged ammo	Clean
	Carbon in chamber	Clean
	Dirt, corrosion, or carbon buildup in barrel or bolt face.	Clean
Won't Lock	Frozen extractor	Remove & clean
	Restricted buffer assembly	Remove & clean
Won't Extract	Restricted movement of bolt carrier group	Remove, clean, & lube.

Selector Lever Binds	Needs oil	Lubricate with CLP
	Dirt or sand under trigger	Clean
Bolt Carrier "Hung up"	Round jammed between bolt & charging handle or is double feeding	Remove magazine. Push in on the bottom of the bolt latch. While pulling down on the charging handle, tap the rifle butt on the ground. Bolt should lock to the rear.

Warning: **Keep clear of muzzle.**
Caution: **After round is removed, bolt is under tension.**
Note: **If this procedure fails, use a section of cleaning rod to push the bolt fully to the rear through the ejection port.**

Limited One Year Warranty

Bushmaster Firearms, Inc. products are warranted to be free from defects in material and workmanship. Warranty cards are included with all firearms and should be completely filled out and sent to Bushmaster Firearms, Inc. to activate the terms of the warranty. Any such defect of which Bushmaster Firearms, Inc. is given written notice, as provided below, within one year and ten days from the date of first purchase by a customer will be remedied by Bushmaster Firearms, Inc. This warranty is granted by Bushmaster Firearms, Inc., 999 Roosevelt Trail, Windham, Maine 04062.

To initiate a warranty claim call Bushmaster Firearms, Inc. at 1-800-883-6229, between 8:30 am and 6:00 pm E.S.T., Monday through Friday to get a "Return Merchandise Authorization" number. Warranty claims (transportation charges prepaid), should state the model and serial number of the gun concerned, a description of the difficulty experienced, and the date of purchase. It is recommended that shipment be insured by the owner, since Bushmaster Firearms, Inc. will accept no responsibility for loss or damage in transit. Transportation and insurance charges for return to owner will be paid by Bushmaster Firearms, Inc., if the related claim is a proper claim for warranty work. The firearm should then be sent to the Warranty Service Department, Bushmaster Firearms, Inc., Lake Havasu Division, 1070 Metric Drive, Lake Havasu City, AZ. 86403.

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This Manual Should Always Accompany
Your Bushmaster Carbon 15 Firearm!

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